

REMARKS

The Specification has been amended. New replacement drawings for Fig. 1 and Fig. 2 are submitted. Claims 1- 4, 9, 10, 12, 14, 17, 21, 22-29, 31, 32, 35, and 36 have been amended. Claims 13 and 33-34 have been cancelled. Claims 1-12, 14-32, and 35-36 remain in the application. Further examination and reconsideration of the application, as amended, is hereby requested.

Drawings

In Section 1 of the Office Action, the Examiner objected to the drawings under 37 CFR1.83(a). The Examiner suggested that the Applicants submit the informal drawing as a replacement drawing sheet to overcome the objection. Accordingly, the Applicants are submitting herewith replacement drawing sheets for Figs. 1 and 2 and have amended the Specification in paragraph [0007] to particularly callout the surface with the reference character number 33. No new matter has been introduced. Withdrawal of the objection and acceptance of the replacement sheets for Fig. 1 and Fig. 2 is respectfully requested.

Claim Objections

In Section 3 of the Office Action, claim 36 was rejected under 35 USC 112, 2nd Paragraph as being indefinite for failing to particularly point out and distinctly claim the subject matter which the Applicants regard as their invention. Applicants have amended claim 36 in light of this rejection and subsequent amendments to claim 1 and now believe that claim 36 is in proper form for examination. Withdrawal of this rejection and examination of claim 36 is respectfully requested.

In Section 5 of the Office Action, the Examiner rejected claims 1-3, 21, 25, 27, 33, and 35 under 35 USC 102(e) as being anticipated by Ohmae et al. Applicant has amended claim 1 to include the limitations of claim 13, which was indicated as allowable. Applicant has further amended claim 1 and other claims to correct possible antecedent basis issues and to make more clear the use of "color wheel", "color wheel cartridge", and "color wheel disc" more definite and certain to address the Examiner's concerns in the prior office action. "Color wheel" encompasses generically either a "color wheel cartridge" or a "color wheel disc" when used alone in a claim. Accordingly, claim 1, as amended, is believed to be in condition for allowance. Claims 2-3 depend on claim 1 and are believed patentable based at least on the patentability of claim 1.

Claim 21 has been amended further to distinguish it over the art made of records as follows:

21. A projector, comprising:
means for *easily and slideably* replacing a color wheel by a *user of the projector*, and
means for directing light from a light source through at least a portion of the color wheel.

The Examiner asserts that Ohmae teaches a "readily" replaceable color wheel because of the O-ring gasket and the color wheel being mounted on a stand that allows the color wheel to be removed without destroying the rest of the projector. Accordingly, the Applicants are more particularly claiming that the means for replacing the color wheel now be done "easily and slideably" by a "user of the projector." These limitations find support throughout the specification and in particular in para. [0007]. Ohmae does not disclose, teach, or suggest that the user of the projector be able to "easily and slideably" replace the color wheel. Accordingly, claim 21 as amended is believed patentable over Ohmae. Withdrawal of the rejection under 35 USC 102(e) for claim 21 and its allowance is respectfully requested.

Claim 25 has been similarly amended further to distinguish it over the art made of record and to correct antecedent basis as follows:

25. A projector, comprising:
a replaceable color wheel cartridge *easily slideable into the projector by a user* including a housing with a spindle for receiving a color wheel disc, the housing having a cutout portion to permit light to be projected therethrough to impinge on only a portion of the color wheel disc disposed therein, the color wheel disc disposed on the spindle, and a motor for driving the spindle; and
means for directing light from a light source through at least a portion of the color wheel disc.

Ohmae does not disclose, teach, or suggest a replaceable color wheel cartridge that is "easily slideable into the projector by a user" as explained for claim 21. Claim 27 depends on claim 25 and is believed patentable based at least on the patentability of claim 25. Withdrawal of the rejections under 35 USC 102(e) for claims 25 and 27 and their allowance is respectfully requested.

Applicant has cancelled claim 33.

Claim 35 has been similarly amended to correct antecedent basis issues and to include the limitation of where the method of operating the projector includes loading a replaceable color wheel "easily and slideably" into the projector. Ohmae does not disclose, teach, or suggest "easily and slideably" loading a replaceable color wheel into the projector as described previously. Withdrawal of the rejection under 35 USC 102(e) and allowance of claim 35 is respectfully requested.

In Section 7 of the Office Action, the Examiner noted that he presumes the subject matter of the various claims was commonly owned at the time of any invention. The Examiner is correct in this presumption.

In Section 8 of the Office Action, the Examiner rejected claims 4-12, 14-20, 22, 23, 26, 29-32, and 34 under 35 USC 103(a) as being unpatentable over Ohmae and further in view of Kunzman. Applicant respectfully traverses this rejection in light of the following reasons.

Claims 4-12 depend upon claim 1 and are believed patentable based at least on the patentability of claim 1, as amended. Claims 4-12 are believed separately patentable, some of which reasons are noted below.

Specifically for claim 4, while Kunzman discloses a memory in the form of a EEPROM or similar IC located in a color wheel cartridge, Applicant is claiming, as amended, that the memory is disposed on the color wheel itself in the color wheel cartridge. By having the memory be part of the color wheel, it can be optically read as noted in the specification in para. [0013].

Specifically for claim 6, Kunzam does not disclose having the memory in the color wheel cartridge contain firmware for updating the firmware in the projector.

Specifically for claim 7, Kunzam does not disclose having the memory contain a diagnostic program that can operate test procedures on the projector. Kunzam only discloses that it would an alternative to have the projector calibrate itself but not disclose that the calibration software is located on the EEPROM only that the final calibration tables are programmed into the EEPROM in addition to the color wheel rates and PWM patterns (end of col. 10 and top of col. 11).

Specifically for claim 10, as amended, Kunzam does not disclose having the color wheel be replaceable with an optical media (see [0015]).

Claims 14 has been amended as follows to further distinguish and define over the art made of record:

14. A color wheel *for use in a projector*, comprising:
a replaceable color wheel disc *configured to be easily slideable by a user into the projector*, and

a memory disposed on the color wheel disc optically readable by the projector to allow downloading of information into the projector.

As amended, claim 14 now limits the replaceable color wheel disc to be easily slideable by a user into the projector and that the memory be disposed on the color wheel disc itself and optically readable by the projector to allow downloading of information into the projector. Neither reference alone or in combination disclose, teach, or suggest these limitations.

Claims 15-20 are believed patentable based at least on the patentability of claim 14, as amended.

Claims 22-23, as amended, are believed patentable based at least on the patentability of claim 21, as amended.

Claims 26, 29, and 30 are believed patentable based at least on the patentability of claim 25, as amended.

Claims 31 and 32 have been amended to include the limitation that the color wheel is loaded "easily and slideably" into the projector. These limitations are not disclosed, taught, or suggested by the art made of record for the reasons discussed previously.

Claim 34 has been cancelled.

Withdrawal of the rejection under 35 USC 103(a) and allowance of claims 4-12, 14-20, 22, 23, 26, and 29-32 is respectfully requested.

In Section 9 of the Office Action, the Examiner indicated that claims 13, 24, and 28 were objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitation of the base claim and any intervening claims. Applicants wish to thank again the Examiner for this indication of allowance. Applicants have added the limitations of claim 13 into claim 1, and placed claims 24 and 28 into independent form. Applicants believe that claims 1, 24, and 28 are in condition for allowance and respectfully request they be allowed.

The prior art made of record but not relied upon by the Examiner has been reviewed, but is no more pertinent to Applicants' invention than the cited references for the reasons given above.

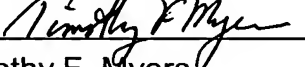
Applicants believe their claims as amended are patentable over the art of record, and that the amendments made herein are within the scope of a search properly conducted under the provisions of MPEP 904.02. Accordingly, claims 1-12, 14-32, and 35-36 are deemed to be in condition for allowance, and such allowance is respectfully requested.

If for any reason the Examiner finds the Application other than in a condition for allowance, the Examiner is respectfully requested to call Applicants' undersigned representative at the number listed below to discuss the steps necessary for placing the application in condition for allowance.

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Respectfully Submitted,

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